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REMARKS

The application includes claims 1-6.

Claims 1-6 were rejected as being obvious over U.S. Patent 6,993,360 to Plahte in view of U.S. Published Patent Application 2004/0006808 to Mukherjee. This rejection is traversed, and all claims, as amended in the previous amendment, are in *prima facie* condition for allowance without further amendment.

As will be discussed in detail below, the Plahte and Mukherjee references are directed to different problems than that which is solved by the present invention, and any combination of the two references lacks features or steps recited in the claims.

As discussed on page 4 of the application, the invention allows an extension telephone system to be used from a fixed terminal at a fixed place and also by freely selected terminals at various places. Figure 1 shows portable information equipment 103 (such as a PDA) connected to an extension telephone 111 of an extension telephone system 101 through a virtual private network (VPN) system 112 on the Internet 113. Communication is achieved using VoIP. Figure 1 shows that authentication is performed at the extension telephone system to authenticate the portable information equipment 103 (thus assuring that only authorized users can use the extension telephone), and that charging can be performed (so that the user of the portable information equipment 103 can be charged for his or her use of the extension telephone).

Figure 2 shows, for example, a temporary staff that has a license to use an extension telephone logging into the extension telephone system 101 from an internet café 102 using his portable information equipment 103. As an example, as explained on page 5 of the application at lines 17-19, logging in is performed using an authentication system. Charging can be carried out at the time of logging in. As noted on page 5, lines 7-11, the system allows temporary staff, for exampoe, to log into the extension telephone system from a place in which the VPN can be accessed based on issued authentication, and thus carry out inexpensive extension calls.

Figure 3 shows the user of the portable information equipment 103 being able to access and use customer information in database 105.

Figure 4 shows the system allows communication with the headquarters and branch offices that are linked by an extension telephone system by an portable information equipment 103 that is remote from the branch offices and the headquarters. Figure 5 shows a variation a variation on the inter-system linkage where a user of a portable information equipment 103 can access an extension telephone of a dispatched company through an employment agency extension.

Figure 6 illustrates a process described in the patent application. Note that a user of portable information equipment accesses a telephone system web server S202 and is authenticated S203. He may also be charged S204. Once a VPN connection is established the user is able to talk with a party at an extension of the extension telephone system S108. Figure 7 shows a variation where the user of the portable information equipment is able to retrieve information from a database after he or she is logged into an extension telephone system S217. Figures 8 and 9 show additional variations on how the system and method can be used.

U.S. Patent 6,993,360 to Plahte was discussed in the last amendment. This reference is directed to a use of a mobile telephone purportedly being enabled to exploit the functionality of a private branch exchange (PBX) as if the user were using a PBX-connected wire line telephone in an office setting (see Abstract). Central to Plahte is the use of a mobile branch exchange (MBX) server 110 which interfaces with and controls the PBX 102. Figures 4a-d are illustrative of how, for example, a mobile client can make a call to a remote party utilizing the MBX and PBX. Specifically, a call is initiated by the client. The MBX then causes a call to be initiated from the user's standard office telephone number. Then through a variety of call route switching operations, a voice communication path is established between the mobile phone 108 and remote number 162 which passes through the PBX 102. As explained in column 12, virtual terminals associated with the phantom number remain in conference throughout the call so as to enable the MBX to re-establish a connection if it is dropped by the mobile network. Variations on this are shown in the remaining figures of Plahte. Central to all of these is routing through the PBX 102.

As acknowledged in the office action, Plahte does not have perform connection to an extension telephone utilizing an authentication system.

However, Plahte differs from the claimed invention by much more than

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just authentication. In short, Plahte does not show connecting the portable information equipment to the extension telephone system through a virtual private network (VPN), with a Voice over Internet Protocol (VoIP) connection executing step of connecting the portable information equipment connected to the extension telephone system to the extension telephone connected to the extension telephone system by VoIP (see claims 1 and 4). Rather, Plahte describes a MBX-PBX system which allows a user of a mobile phone to take advantage of features of the PBX. In contrast, the present invention does not use an MBX to accomplish the switching and routing which is central to Plahte. In addition, the invention contemplates a user being able to use an inexpensive IP telephone (i.e., the portable information equipment is connected to the exchange telephone of the exchange telephone system by VoIP) instead of an expensive portable or public telephone (see page 10, line 14). The Plahte system requires the use of a mobile telephone in combination with an MBX and PBX.

Mukherjee does not make up for the deficiencies of Plahte. In fact, Mukherjee is directed a totally different problem than either the claimed invention or Plahte and does not have any relevance to either technology. Mukherjee is not used in the context of an exchange telephone system. Rather, Mukherjee is directed to an Internet based system which allows for peer-to-peer virtual private network services. The host of addresses of each user device that is to particpate in a VPN session are identified and a virtual private host (VPH) is initiated for each user device so that communication between the VPH and each user device is achieved with a tunnel through the network. See Figure 5 which depicts a plurality of VPN tunnels being used in Mukerjee. All that step 412 in Mukerherjee shows is a determination of whether a user is authorized to participate in the private network. In short, if the person is not registered (312 in Figure 3) or otherwise authorized, the person cannot participate in the session which takes place on the Internet.

Notably, Mukherjee has no application to a telephone exchange system as all participants are communicating with each other over the Internet during a prescribed session. Thus, one of ordinary skill in the art would not combine the teachings of Mukherjee with Plahte.

Further, even if a combination of the two references could be made, such a

combination would, at most determine if the mobile telephone 108 is authorized to use the PBX during a prescribed session. This does not address or make obvious the claimed system and method where portable information equipment is connected to an extension telephone of an extension telephone system by an extension telephone connecting means for connecting the portable information equipment to the extension telephone system through a virtual private network (VPN), wherein the connecting performs an authentication of the portable information equipment and, based on the authentication, selects between connecting and not connecting the portable information equipment to the VPN; and Voice over Internet Protocol (VoIP) connecting means for connecting the authenticated portable information equipment connected to the extension telephone system to the extension telephone connected to the extension telephone telephone system by VoIP.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-6 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

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